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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET NE  
ATLANTA GEORGIA 30365

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MEMORANDUM

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DATE: November 23, 1992

SUBJECT: Review of the Remedial Technologies,  
Alternatives Screening Technical Memorandum  
Olin Chemicals, McIntosh Plant Site  
McIntosh, Alabama

FROM: Nancy L. Bethune, Environmental Engineer  
Ground Water Technology Support Unit

TO: Cheryl W. Smith, Remedial Project Manager  
South Superfund Remedial Branch

THRU: David W. Hill, Chief  
Ground Water Technology Support Unit

Following, per your November 6, 1992, request, are comments and concerns of the Ground Water Technology Support Unit on the above mentioned document. I am available at extension 3866 to discuss any questions or concerns you may have.

pg. 1, Introduction

The purpose of this document is not clear. It is not understood how this document will differ from the FS Report.

pg. 2, Site Background

In addition to the air and water permits, Olin is regulated under the authority of a 1985, Resource Conservation and Recovery Act (RCRA) permit for post-closure, administered by the Alabama Department of Environmental Management (ADEM), and a 1986, Hazardous and Solid Waste Amendments (HSWA) permit, administered by the USEPA. The HSWA permit requires corrective action for releases of 40 CFR 261 Appendix VIII constituents from any solid waste management units (SWMUs) at the facility.

pg. 4, Operable Unit 1

The text indicates that one Brine Filter Backwash Pond was clean closed. Figure 5 indicates the presence of ponds. Which is correct? Were both/all clean closed?

The three impoundments and one waste pile which are subject to closure equivalency determinations will require upgradient and downgradient monitoring wells and detection monitoring, in accordance with 40 CFR 264.98. Has this been initiated? Do data exist?

pg. 7, OU-1 On-Site Ground Water

The determination of a modification to the Corrective Action Plan for ground water remediation is dependent upon the identification of the magnitude and extent of potential ground water contamination in the Miocene Aquifer.

pg. 8, OU-1 Off-Site Ground Water

A map should accompany Table 2.

pg. 13, Old Plant Landfill

The analysis for mercury is a point of concern. The concentration levels are high enough to suspect the possibility of exceeding the Toxicity Characteristic (TC) regulatory level of 0.2 mg/l. The determination of the presence of TC waste will be critical to the selection of a remediation technology.

pg. 27, OU-1 Ground Water

The porosity of 0.30 seems high. Where does this number come from? Since it gives a high estimate as to the volume of water, the number does not pose a problem. It gives a conservative estimate.

pg. 29, OU-1 Soils

Presuming that contaminated soils will be capped to preclude downward percolation is not acceptable. Contaminated soils, with concentrations which exceed risk based standards at the surface and subsurface concentrations which leach to the groundwater, must be addressed as a source.

pg. 30, continued

The presence of high concentrations of mercury in the landfill waste samples suggests the possible presence of D009 RCRA waste. Analysis is essential because the presence of a RCRA waste imposes Land Ban restrictions, treatment standards, and Best Demonstrated Available Technology (BDAT) technology based ARAR.

pg. 43, Soil Alternatives G1 and G2 - Excavation/On-Site Thermal Treatment/Disposal

"Retorting or roasting in a thermal processing unit" as described in 40 CFR 268.42 Table 1 should be included in the technology options. This method is considered BDAT and therefore a RCRA ARAR. Sorting and mixing should also be considered as a prior treatment. Current RCRA policy considers this (physical mixing and sorting) as Subpart X, miscellaneous treatment.

pg. 46, OU-2 (Basin) Sediment Alternative F - Dredging/Acid Extraction/On-site Thermal Treatment/Disposal

Same comment as above.

pg. 49, OU-2 (Wastewater Ditch) Sediment Alternatives G1 and G2 - Excavation/On-Site Thermal Treatment/Disposal

Same comment as above.

Figure 3, Estimated Horizontal Extent of Mercury in Ground Water

Is the presence of mercury in the groundwater north, and upgradient, of potential source areas, considered to be due to withdrawal at the Ciba-Geigy site?

Figure 6, Preliminary Phase III Flood Plain Mercury Results

Have sediment samples been taken from the interior of the basin? If not, they should be.